

"PRIVILEGED LIGHTS."

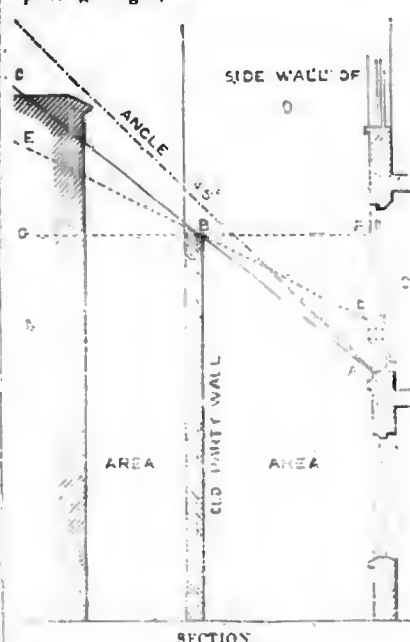
There are few architects practising in this densely-housed metropolis who are insensible to the difficulties connected with "privileged lights," by which I mean those windows which exist and derive an essential amount of light from the property of the adjoining owner, and which, by an uninterrupted existence of twenty years, have obtained a prescriptive or privileged right to a continuance of the same; and the difficulty is aggravated by the absence of any legislative enactment on the subject, so that the architect is left to act on his unaided appreciation of the extent to which this acquired right is to ride over and control the buildings which he is instructed to place on the ground of his employer, and to incur the responsibility of occupying every desired inch of space to which he is entitled, without trenching on the "privileged light;" and an error of judgment, or even a difference of opinion with the owner of that light, may involve his employer in the vexatious and expensive proceedings of a Court of Law or Equity. It is manifest that this embarrassment could be greatly diminished, if not avoided, by a clause in the "Amended Building Act," setting forth a principle of adjustment and appointing a Court of Reference in case of difference of opinion as to its application. I think it probable her Majesty's Commissioners of Works might be induced to insert such a clause, if a principle were presented to them with the general concurrence of the Metropolitan architects; and it is with this view that I am desirous to avail myself of the medium of your journal for the discussion of the principle.

It would be uncandid not to state that I have been spurred to this by an award upsetting the theory on which I have hitherto based my proceedings, and as I propose to use the case out of which it arose as an exemplification of the theory, which I believe to be sound, I may be allowed to beg the gentlemen concerned therein to acquit me of all intention to say anything in the smallest degree offensive or derogatory to their excellent standing and high character.

My theory as to the extent to which a privileged light should prevail over the inherent rights of an adjoining owner is founded on the belief that light falls on and enters an opening or window at an angle of 45° ; and, therefore, that if the new building does not project before or rise above that line of 45° , there is no deprivation of light to such window. In support of this theory I quote the schedule in the Metropolitan Buildings Act, which rules "that every street, alley, or mews hereafter built must be equal in width to the height of the buildings on either side," which is in effect the same as a line of 45° started from the junction of the buildings with the street or road. But the strongest argument I find in favour of this theory is, that it can be universally applied without leading to glaring absurdity or cruel injustice, and that is more than I can say for any other theory with which I have yet had the fortune to meet. In the case I have referred to, it was considered advisable to test the theory by an extreme case, which was put in this form: "Supposing a window to exist in a wall on the boundary of two properties, do you mean to contend that a roof springing from the sill, and rising at an angle of 45° , would not diminish the light in that window?" I answer: "Supposing the material of the roof be not such as by reflection to affect the quality of the light, I do believe that it would not lessen the amount of light transmitted by that window to an apartment." And it should be remembered that the person who depends on his neighbour's property instead of his own for light, is not a person for whom the law should be strained. We shall presently see where the principle of the award, if any may be inferred, will carry us, when applied under slightly different circumstances.

In the diagram subjoined the old house is denoted by the letter O, the new building by the letter N. The angle of 45° there shown is the line to which I claimed the right to carry

the new building without interference with the "privileged light," L.



The umpire has awarded, "That the new buildings shall not be carried above the line A B C, which line is to be drawn from the top of the wooden sill of the window, touching the inner top edge of the old party wall."

You will readily conceive my gratitude that the consequences are not more serious; for, if the sill of this window had been three feet above the floor, no uncommon case, the principle of the award which hinges on the "inner top edge" of the wall, would have swept away half the top story of my building, D B E; and to carry out this theory, the more nearly the sill of the window reached the level of the said wall, the more tremendous would be the effect on the adjoining property, and when at the level, away must go the whole of the story. F B G. I do not imagine that the gentleman in question would have made any such award, but I think this case goes far to prove the necessity of some established principle. There are many familiar illustrations that would assist in showing soundness in my theory, but I do not feel justified in trespassing further on your courtesy, and they will readily present themselves to any person thinking earnestly on the point, and testing it by a variety of diagrams. In conclusion, I wish to observe, that I do not for one moment lay claim to this theory as original or peculiar; indeed, I know it is largely adopted by the most eminent members of my profession, and I confess I considered it so generally recognised amongst us, that I was free from fear when circumstances permitted me to comply with its rules; but now, alas!—in Celtic parlance—"I am landed in a sea of difficulties," and I shall be sincerely obliged to any one who will set me right, or lend a hand to procure an authoritative decision on this much-vexed question of "privileged lights."

C. F.

HYDRAULIC POWER AT SEA.—Mr. Seydell, naval architect at Stettin, and Mr. Ruthven, an English engineer, are said to have constructed a ship which is impelled neither by wind, oars, nor steam, but by retro-active hydraulic power.

"STEAM SUPERSEDED."—A new motive power is said to have been discovered or invented by Mr. J. Bourke, of Limerick, coachmaker. "The mechanism of the invention is quite simple, consisting of only 16 plain formed iron cranks, with six frames, which stand in the centre of the machine, inclining one towards the other. It can be erected upon two pair of wheels and two pair of springs, there being also 12 small wheels, or pulleys, with three levers, one bearing on the other, and by which it will be propelled."

GREEK AND ROMAN ARCHITECTURAL ANTIQUITIES.

AMPHITHEATRE—AMPHITHEATRE—THEATRE.

MAKING a second dive into Dr. Smith's depository of classical knowledge,* we fall on the word *Amphitheatrum*, and, with the certainty of telling some of our readers little more than they know, simply refreshing their memories, we nevertheless proceed to give a summary of the article.

The Amphitheatre, all know, was a building arranged for the purpose where were held the combats of the gladiators and wild beasts, representations of mimic sea fights, &c. These exhibitions—peculiar to the Romans, and probably unknown to the Greeks, until introduced by that people—were originally made to take place in the Forum or the Circus; but this latter, being long and narrow, better adapted, in fact, for the chariot races, for which it was first designed; and the *spina*, a low wall, about 12 feet broad, and some 4 feet high, running along the whole length of the arena, the *meta* or goals at either extremity, offering a great impediment,—some new form of building was required, which should accommodate a multitude of spectators in such a manner that all might have a good view of the space occupied by the combats: these shows, or slaughterers rather, becoming in time the favourite amusement. The idea of such a building was suggested, as its name seems to imply, by the existing theatre, *amphi* on both sides. *theatre*, a theatre, a place for beholding. Indeed, the first amphitheatre of which we have any account—that of C. Scribonius Curio—was literally composed of two theatres placed on pivots, so that they could be turned back to back, forming two distinct structures for dramatic performances, or face to face, completing the amphitheatre. The erection of the next was effected by Julius Cæsar during his perpetual dictatorship, B.C. 46; and it was not till the fourth consulship of Augustus, B.C. 39, that a more durable amphitheatre of stone was erected by Statilius Taurus, in the Campus Martius (wood having been used for their construction, which some times proving inadequate to support the weight of the immense body of spectators, occasioned serious accidents: one, we are told of, built at Fidene, in the reign of Tiberius, gave way, burying in its ruins either 20,000 or 50,000 spectators). That Statilius's building was simply composed of stone, as far as regards the carcass only, and that the staircases and seats were of wood, seems highly probable, as in the burning of Rome, A.D. 64, it was destroyed. Caligula also commenced one near the *Septa*, but the work was not continued by Claudius; and Nero, Cæsar, in his second consulship, A.D. 57, erected a vast temporary building of wood.

The erection of an amphitheatre in the midst of Rome, proportional to the magnitude of the city, was among the designs of Augustus; but it was not till the reigns of Vespasian and Titus that it was carried into effect by the erection of the *Amphitheatrum Flavium*, or, as it has been called since the time of Hæde, the Colosseum, or Coliseum,—a name said to be derived from the Colossus of Nero, which stood close by.

This wonderful building, which for magnitude can only be compared to the Pyramids of Egypt, and which is perhaps the most striking monument at once of the material greatness and the moral degradation of Rome under the empire, was commenced by Vespasian, but at what time is uncertain, the date assigned by Lepsius, A.D. 77, being more than doubtful; and completed by Titus, who dedicated it, A.D. 80, when were slaughtered 5,000 animals of different kinds. There is an ecclesiastical tradition, but not entitled to much credit, that the architect of the Colosseum was a Christian, and afterwards a martyr, named Gaudentius, and that thousands of the captive Jews were employed on it. In the reign of Macrinus, on the day of the Vulpesalia, it was struck by lightning, by which the upper rows of benches were con-

* Dictionary of Greek and Roman Antiquities. Edited by William Smith, LL.D. Second edition. London: Taylor, Walton, and Maberly; and John Murray.